

POWERED OPENING SOLENOID CONTROLLED VALVE

with Active Double Chamber

Model 710-B

Double chambered, hydraulically operated, solenoid controlled valve that either opens fully, regardless of valve differential pressure, or shuts off in response to electric signal. This valve is especially useful in very low pressure applications and in corrosive fluid systems that are controlled by external fresh water or compressed air. Normally open (NO), normally closed (NC) or LATCH models are available.

The BERMAD 700 SIGMA EN/ES series valves are hydraulic globe valves with a raised seat and double chamber actuator. They provide unobstructed flow, effective high-pressure modulation, and minimal cavitation, complying with various potable water standards.



Features & Benefits

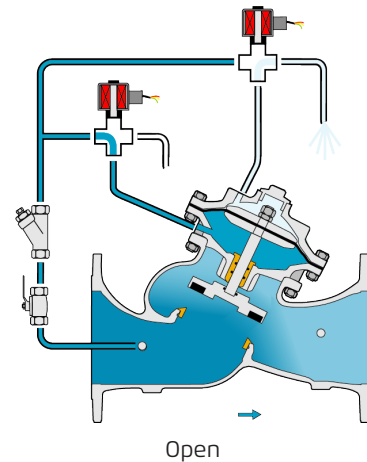
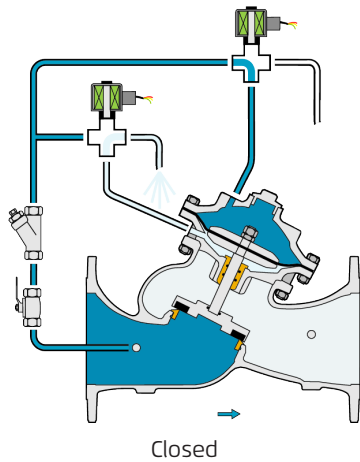
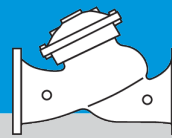
- Designed to - Stand up to the toughest conditions
 - Excellent anti-cavitation properties
 - Wide flow range
 - High stability and accuracy
 - Drip tight sealing
- Double chamber design
 - Moderated valve reaction
 - Protected diaphragm
 - Optional operation in very low pressure
 - Moderated closing curve
- Flexible design - Easy addition of features
- Obstacle free flow pass
- V-Port throttling plug (optional) - Very stable at low flow
- Compatible with various standards
- High quality materials
- In-line serviceable - Easy maintenance

Typical Applications

- On/Off operation in near-zero pressure
- Water reservoirs - Bypass for direct supply during reservoir maintenance
- Filtration system - Channeling flow during backflushing in an automatic filtration system

Typical Installation





This drawing refers to 1½" – 8"; 40-200 mm sized valves only. For other sizes please refer to the Model's IOM.

Main Valve

Size Range:

EN Series: 1½"-16"; DN40-400

ES Series: 2½"-24"; DN65-600

Pattern: "Y" (globe)

Pressure Rating: 250 psi; 400 psi

End Connection: Flanged

Plug Types: Flat disc, V-port, Cavitation cage

Temperature Rating: 180°F

For 140–180°F consult factory

Standard Materials:

Body & Cover: Ductile Iron

Bolts, Nuts & Studs: Stainless Steel

Internals: Stainless Steel, Tin Bronze, Coated Steel & POM

Diaphragm: Fabric-reinforced synthetic rubber

Seals: Synthetic rubber

Coating: Dark blue Fusion bonded epoxy

For other materials contact BERMAD

Control System

Standard Materials:

Accessories: Stainless Steel, Bronze & Brass

Tubing: Stainless Steel or Copper

Fittings: Stainless Steel or Brass

Solenoid standard materials:

Body: Brass or Stainless Steel

Elastomers: NBR or FPM

Enclosure: Molded Epoxy

Solenoid Electrical Data:

Voltages:

(AC): 24, 110-120, 220-240, (50-60Hz)

(DC): 12, 24, 110, 220

Power Consumption:

(AC): 30VA, inrush; 15VA (8W), holding or 70VA, inrush; 40VA (17.1W), holding

(DC): 8-11.6W

Values may vary according to specific solenoid model.

For more details check solenoid product page.

Notes

- Inlet Pressure, Outlet Pressure and Flow-rate are required for optimal sizing.
- Recommended maximum flow velocity: 6.0 m/sec; 20 ft/sec.
- Minimum operating pressure: 0.2 bar; 3 psi. External operating pressure recommended.

For detailed Engineering & Specification data, IOM and CAD Drawings, visit the Model Page on the [BERMAD](https://www.bermad.com) website.